

62.69

RUFFLED
CAMELLIA TYPE
TUBEROUS BEGONIA

1956
CATALOG



VETTERLE & REINELT

Hybridizing Gardens

CAPITOLA • CALIFORNIA

Price 15c



1955 Season . . .

The show of tuberous begonias in our greenhouse was the finest we have ever had. Hanging Baskets from the older tubers reached enormous size and the visiting public would hardly believe that all that came from one tuber.

Among the new seedlings we are beginning to make progress in breeding mildew resistant stock, but it will be quite a few years until full color range is developed.

We are withdrawing the hanging variety "Golden West" from sale until we propagate more stock, but suggest instead the selected stock of hanging type, which were greatly improved the last few years.

Also we would like to take this opportunity to thank our customers for their support, without which the work of improving flowers could not go on.

VISITORS WELCOME

February and March is the Primrose time at our Capitola grounds.

Delphinium reach the height of bloom in early July at the Santa Cruz Ranch on Mission Street.

The finest collection of Tuberous Begonias in the world can be seen in our greenhouses during July and August in Capitola. Over 5000 specimens of all types and colors demonstrating all the new advances in breeding are on display, making any flower show look insignificant in comparison. More than 50,000 visitors come to view the display each year during the summer months.

Our main fields of begonia seedlings are located on Mission Street in Santa Cruz and at La Selva Beach, near Aptos. Here solid sheets of color can be seen during September and October.



DOUBLE HANGING BASKET

Its hanging habit, with great masses of blooms, makes them favored for the decoration of greenhouses, open verandas or sun porches, where they can be protected against strong winds and light. We have been improving this type by interbreeding them for a number of years with the double Camellia type for the size of flower and variety of color. Our this year's offerings are further advanced, combining medium-sized flowers and good hanging habit.

COLORS

White	Rose	Salmon	Apricot	Scarlet
Pink	Crimson	Yellow	Orange	Red Salmon

PRICE

TUBERS . . . Delivery, January-March. Large size 50c each; \$5.00 per dozen; \$40.00 per 100
Medium size 40c each; \$4.00 per dozen; \$30.00 per 100

SEEDLING PLANTS . . . Available in May and June.
\$6.50 per 25; \$25.00 per 100, FOB CAPITOLA
(No orders for less than 25 accepted, due to cost of packing)

SEED . . . \$3.00 per packet; \$1.50 per half packet. (Straight colors or mixture.)

SPECIAL SELECT TUBERS

During flowering season we select and mark all the choicest new seedlings which are above average in size, form and color. We are offering tubers of these to connoisseurs who desire only the finest for their gardens.

Tubers . . . Delivery, January-March. Specimen size \$1.50 each; \$15.00 per dozen
Large size \$1.00 each; \$10.00 per dozen
Medium size \$.80 each; \$ 8.00 per dozen



TUBEROUS BEGONIAS ROSEFORM TYPE

The ultimate classical form in tuberous begonias is that resembling the roses for which we have been striving, selecting and breeding for years. The transition from Double Camellia form from which the Rose form was developed is not fully completed. However, these plants formerly listed as double camellia type are now more of a Rose form, although some percentage will still resemble the Double Camellia.

AVAILABLE COLORS White, Pink, Rose, American Beauty, Cardinal Red, Scarlet, Dark Red, Yellow, Apricot, Orange, Flame Orange, Blush Salmons, Pink Salmons, Light Salmons, Dark Salmons.

TUBERS Delivery, January-March
Large size 50c each; \$5.00 per dozen; \$10.00 per 100
Medium size 40c each; \$4.00 per dozen; \$30.00 per 100

SEEDLING PLANTS Available in May and June
\$6.50 per 25; \$25.00 per hundred, FOB CAPITOLA.
Due to cost of packing no orders for less than 25 accepted.

SEED Artificially cross-pollinated from the finest plants in existence.
\$3.00 per packet; \$1.50 per half packet (straight colors or mixture)

SPECIAL SELECT TUBERS

Contrary to the practice of propagating named varieties of tuberous Begonias, we offer selected seedling tubers instead. Propagation of individual varieties is costly and slow, so that by the time a sufficient amount has been reproduced for introduction they are already obsolete as compared with seedlings. Breeding is advancing so rapidly that today's choice is the discard of tomorrow. **During flowering season we select and mark all the choicest new seedlings which are above average in size, form and color. We are offering tubers of these to connoisseurs who desire only the finest for their gardens.**

Colors available as listed above.

Tubers . . . Delivery, January-March. Specimen size \$1.50 each; \$15.00 per dozen
Large size \$1.00 each; \$10.00 per dozen
Medium size \$.80 each; \$ 8.00 per dozen



TUBEROUS BEGONIAS

RUFFLED CAMELLIA TYPE

Originated by us, by interbreeding the best forms of the Camellia and Fimbriata Plena types, this group has reached perfection of new forms, sometimes resembling the Camellia type, or at times like huge Fimbriata Plena. For beauty and variation they are rivalling all other types.

AVAILABLE COLORS White, Pink, Rose, Carmine Red, Scarlet, Dark Red, Yellow, Apricot, Orange, Flame, Blush Salmon, Pink Salmon, Light Salmons, Dark Salmons.

TUBERS Delivery, January-March
 Large size 50c each; \$5.00 per dozen; \$40.00 per 100
 Medium size 40c each; \$4.00 per dozen; \$30.00 per 100

SEEDLING PLANTS Available in May and June
 \$6.50 per 25; \$25.00 per hundred, FOB CAPITOLA.
 Due to cost of packing no orders for less than 25 accepted.

SEED Artificially cross-pollinated from the finest plants in existence.
 \$3.00 per packet; \$1.50 per half packet (straight colors or mixture)

SPECIAL SELECT TUBERS

Contrary to the practice of propagating named varieties of tuberous Begonias, we offer selected seedling tubers instead. Propagation of individual varieties is costly and slow, so that by the time a sufficient amount has been reproduced for introduction they are already obsolete as compared with seedlings. Breeding is advancing so rapidly that today's choice is the discard of tomorrow. **During flowering season we select and mark all the choicest new seedlings which are above average in size, form and color. We are offering tubers of these to connoisseurs who desire only the finest for their gardens.**

Colors available as listed above.

Tubers . . . Delivery, January-March. Specimen size \$1.50 each; \$15.00 per dozen
 Large size \$1.00 each; \$10.00 per dozen
 Medium size \$.80 each; \$ 8.00 per dozen



ROSE FORM PICOTEE SHADES

The most spectacular advance in tuberous begonias is the transformation of the little old marmorata into the large Rose Form Picotee of today, a process of twenty years breeding. Of all types, this group brings the highest proportion of uniformly fine form when grown from seed. The demand has risen in proportion to the advances in quality and has made them the most popular of all types. Regardless that we grow larger quantities each year, we never seem to satisfy the demand.

Colors . . . Red Shades, Pink-Rose Shades, Salmon Shades, Apricot

Tubers . . . Large size 50c each; \$5.00 per dozen; \$40.00 per 100
Medium size 40c each; \$4.00 per dozen; \$30.00 per 100

Seed . . . \$3.00 per packet; \$1.50 per half packet. (Straight colors or mixture.)

Seedling Plants . . . Available in May and June.

\$6.50 per 25; \$25 per hundred, FOB CAPITOLA

(No orders for less than 25 accepted, due to cost of packing)

SPECIAL SELECT

During flowering season we select and mark all the choicest new seedlings which are above average in size, form and color. We are offering tubers of these to connoisseurs who desire only the finest for their gardens.

Tubers . . . Delivery, January-March. Specimen size . . . \$1.50 each; \$15.00 per dozen
Large size \$1.00 each; \$10.00 per dozen
Medium size \$.80 each; \$ 8.00 per dozen

THE CULTURE OF PACIFIC STRAIN TUBEROUS BEGONIAS

Pacific Strain Tuberous Begonias may be grown and increased by three means: Seeds, tubers, and vegetative cuttings. Whether grown from seed, tubers, or cutting, the cultural cycle is considered a full twelve month period. Given ideal conditions the following dates and advice are a guide for rooting, plant growth, flowering, and dormancy.

SOWING SEED...

Pacific Strain Tuberous Begonia seed is sown in January or February. The preferred seeding medium is a partially rotted hardwood leaf mold, with a pH of 6. to 6.8. This should be sterilized with Larvicide, to insure destruction of all harmful organisms. Screen the sterilized leaf mold through a $\frac{1}{2}$ inch mesh screen, placing a thin layer of the coarse material on the bottom of a 3 inch deep nursery flat, or shallow box, and fill to a depth of 1 inch with the screened leaf mold. Firm lightly, and with a fine spray moisten thoroughly with sterilized water. As an extra precaution sterilized water should be used prior to germination, and for four weeks after seedlings appear. Coating the seed with Rootone will make the sowing of seed easier. Broadcast seed thinly on the moist leaf mold. Do not cover seed, or firm leaf mold. Immediately seal tightly with a sheet of glass, and preclude all light with a sheet of paper. A constant minimum top and bottom temperature of 74° will insure an even germination within 8 days. Moisture should be checked every other day, being especially watchful on the 6th and 7th day. Paper must be removed when seed coat is observed to be splitting, even before the green of emerging cotyledons is evident. The glass should at first be raised slightly with a match stick, and air admitted gradually, removing glass completely within a week or ten days. Seedlings must be kept evenly moist with a fine spray, and given sufficient light and air to maintain compact plant growth. Stagnant air and over watering will cause Damp-Off. A spray of 1 tablespoon of Zerlate to 1 gallon of water will control this disease. The consistent feeding of Atlas Fish Emulsion at $\frac{1}{3}$ recommended strength, bi-weekly, will give the tiny plants stamina.

TRANSPLANTING SEEDLINGS...

Transplanting is accomplished before plants crowd one another. The first transplant is usually made within eight weeks of sowing, and for heavier root systems, a

second in sixteen weeks. For transplanting, fill flat with the same leaf mold, unscreened. Do not pack; leave material loose and fluffy. Continue to feed fish emulsion bi-weekly. WATER CAREFULLY, maintain even moisture, avoid soggy wetness. Seedlings will be ready for potting, or planting out in May. Recommendations for light conditions, and proper potting and outdoor planting methods are outlined under tuber culture, and will apply for seedling plants.

PLANTING DORMANT TUBERS...

Time and effort will be conserved if Pacific Strain tubers are planted in the starting flat after they show pink buds. The planting medium is preferably a coarse hardwood leaf mold, with a pH of 6. to 6.8, or an organic substitute, which will not pack and become soggy, thereby excluding air. Peat moss, holding 90 per cent of its weight in water when saturated, is not recommended as a starting medium for dormant tubers. Fill a nursery flat with coarse leaf mold, and space the tubers evenly, allowing sufficient space between tubers for heavy root development, which may be considered the most important factor in the ultimate growth of fancy begonias. Bury the spaced tubers, covering with $\frac{1}{2}$ inch of leaf mold. This is a very essential step, one which we wish to emphasize strongly. Its omission will preclude the full development of roots from the tuber's base, sides, and top, as nature intended. The planted flat should be WATERED CAREFULLY, maintaining even moisture, but not soggy wetness. Place flat in strong light; shield from direct sun's rays. A warm 65° to 75° temperature will hasten growth. Every effort should be made for close, compact plant growth, and prevent any suggestion of weak, spindly growth. Plants are potted, or planted in prepared beds, if the weather is favorable, when the first two leaves have reached equal development. At this stage the roots are heavy, and will adjust to transplanting.

TRANSPLANTING MATURE PLANTS...

Firstly, to consider transplanting from flat to pots. Begonias do not root deeply, and the shallow 8 or 9 inch azalea pots are preferred to the deeper pots. Our standard potting mixture consists of $\frac{2}{3}$ partly rotted oak leaf mold and $\frac{1}{3}$ coarse sand. Remove plant from starting flat carefully. Mix one handful of fish meal with enough potting mixture to fill the bottom $\frac{2}{3}$ of

CULTURE OF PACIFIC STRAIN T

pot, place plant in pot, fill in around root mass. Firm, and finish by covering top of root mass lightly with a quarter inch of potting soil. **WATER CAREFULLY.**

The prime soil consideration for outdoor beds of Pacific Strain tuberous begonias is perfect drainage. One-third leaf mold, $\frac{1}{3}$ sand, $\frac{1}{3}$ sandy loam is good. The addition of $\frac{1}{2}$ sand to existing garden soil will generally drain well. If rotted cow, or steer manure is added to the bed, it should be mixed thoroughly a month in advance, and watered several times. In planting, place a handful of fish meal under the root mass, and barely cover the root mass with soil. Soil should not be pulled in contact with plant's stalk. The points of all leaves should face the front of bed, presenting a uniform appearance to finished planting. Location of planting area in relation to the sun is important, and can spell success or failure. Pacific Strain tuberous begonias are semi-shade plants. They will not perform satisfactorily in complete shade, nor in a bright, sunny spot. If too shaded there will be little or no bloom, but lush plant growth. Excess sun will stunt and burn. The correct degree of light and shade will produce strong, compact plants, and profuse bloom. Suggested locations include the north side of buildings, light tree shade, lath houses. Plan for plants to receive morning or afternoon sun, but shielded from hot noonday rays. Pots may be shifted from place to place until the right spot is found. After transplanting, the most important consideration is **CAREFUL WATERING** until new roots form and growth is evident.

FEEDING . . .

For pots or beds a definite feeding program will reward the grower with stronger growth, and increased bloom. After transplanting, when active growth is observed, commence the following routine: Feed 1 tablespoon of Atlas Fish Emulsion, combined with 1 tablespoon of California Liquid's 8-8-4, mixed in 1 gallon of water once a week until plants begin to flower. After plants begin to flower switch to this combination: 1 tablespoon of Atlas Fish Emulsion, combined with 1 tablespoon of California's liquid's 2-10-10 in 1 gallon of water once a week. Cease to fertilize by the end of September. The use of the first combination is intended to induce strong plant growth; the latter combination will harden cell structure, strengthen flower stems, provide an abundance of firm, highly colored blossoms, and store energy for the tubers' resting period. The individual must judge when plants are under fed, well fed, or over fed.

Maintain a deep green color, and a meaty thickness of leaf. A slight turning under of the leaves is no cause for alarm, a definite "roll" indicates over feeding. Beware of a sickly yellow green, the sign of starvation. The current season's care and feeding will be reflected in the following season's flowering.

DIGGING AND DORMANT STORAGE . .

Plants should be allowed to continue growing through November, if possible. During this late period the tuber increases in size and stores up energy for next season. Pot plants may be forced into dormancy at any time by withholding water. Bedded plants may be dug with a ball of soil, placed in a dry shed if necessary to force dormancy. The first light frosts will not harm the tuber. When foliage drops, and all growth breaks free of the tuber, wash soil free of tuber and cure in the hot sun for four days, or longer, until tuber is hard and dry. Be sure to remove all particles of the old stem from tuber. If this is neglected their decay will destroy the tuber. Store in open flats in a cool, dry place until evidence of growth is noted, usually in February or March. Remove from storage, and handle as outlined under "Planting Dormant Tubers."

CULTURE OF HANGING BASKET BEGONIAS . . .

Pacific Strain basket begonias have the same cultural requirements as already outlined, with minor exceptions. For the best results the larger tubers, having many flowering branches, will stage a more lavish show. Basket tubers are more sensitive to excess moisture than the standards. For this reason do not over pot and use shallow containers for planting. Baskets should be hung in a still, wind free location. Basket tubers, which do not show more than two branches at the beginning of the season, should have the tips pinched off when the first flower bud appears. This will form a fuller basket. **WATER CAREFULLY** until the plant is well rooted, and then never allow plant to become dry, or in need of fertilizer.

PROPAGATION BY CUTTINGS . . .

A week or two before potting, excess shoots should be removed, leaving the strongest to flower. This removal will concentrate the entire energy of the roots in one dominant stalk, and provide propagating material

TUBEROUS BEGONIAS — Continued

for those interested in increasing a favorite plant. With a sharp knife sever stalk by a parallel cut as near to tuber as possible, short of injury. Plant cuttings in a flat of leaf mold topped with $\frac{1}{2}$ inch of sand. Place flat in a close box or frame, heavily shaded. Moisten with a fine spray at least once a day until well rooted, in about six weeks. Harden gradually, and then treat as outlined for tuber plants.

CARE, INSECT, AND DISEASE . . .

When plants are budded, if they are secured to an inconspicuous bamboo stake with raffia or Twist-Ems, plant damage from children, animals, and wind will be minimized. Old flowers should be removed before petals shatter and lodge around plant. Decaying plant material on live tissue will cause rot. With a sharp

knife cut out infection, and dust wound with Zerlate. The use of Ortho Isotox will effectively control all chewing and sucking insects. The larvae of Brachyrhinus, a small white grub, which feeds on the tuber, is controlled by an Isotox drenching of the soil, or Dieldrin. The adult beetle can be killed from May through the summer months, by spraying with Isotox, or baiting with Bug-Geta. Powdery Mildew, the number one enemy of tuberous begonias must be controlled, or it will destroy the entire planting. Ninety per cent sulphur dust used as a preventative before bloom is effective. After blooms appear care must be exercised, or the sulphur fumes will bleach and burn blossoms on hot days. One of the most thorough water sprays is Mildont (Mildex, Karathane, Iscothane). Whether a dust or spray is used, it must be applied regularly, daily, or weekly, as the need may be, to effect a control.

THE CULTURE OF DELPHINIUM HYBRIDS

SEED . . .

Delphiniums can easily be grown from seed which can be sown practically any time of the year, according to the climatic conditions, equipment available or time of flowering desired. Under California conditions, for early spring flowers, sow from June to September; for midsummer blooms, December to January; and for fall blooms, February to April. In regions with severe winters, the early summer sowing, from June to July, is recommended, so that the little plants are well established before the winter sets in. Otherwise, the most practical time to sow is early spring. Seed can be kept in good condition for several years if kept in air-tight containers in a refrigerator. In fact, it is practicable even with fresh seeds to place it between two moist blotting papers and leave it directly under the freezing compartment of the refrigerator for at least a week to induce higher germination. For best results, sow in flats in a mixture of two-thirds coarse leaf mold and one-third loam, covering slightly with the same mixture, and moisten thoroughly. To prevent evaporation, cover the flats with newspaper and glass until germination takes place. Immediately after the young plants begin to appear, both the glass and the newspaper should be taken off; however, the plants should be kept shaded and kept moist constantly.

GERMINATION . . .

Artificial heat can be used for germination in early spring and it will give far better results than the natural heat in summer. To get the best results in germination, bottom heat is necessary, with a cool temperature overhead. This is well supplied under glass in early spring; however, in summer, due to hot weather conditions, it is usually the opposite and this is why many people have failures even with the very freshest seed. At temperatures of 85 degrees Fahrenheit and up, the germination is often very poor and what germinates stands a very good chance of being simply cooked. To prevent this, after the seeds are sown in flats, place them on the floor in a cool room or shed, where they can be kept dark for the first ten days, until germination takes place. Then give light and fresh air, but keep them well protected against any drying out. We have repeatedly checked on seeds which were sown under greenhouse conditions in summer or the cool shed method or a well-shaded lath house, and the results in each case were from 20 to 50 per cent better under lath house conditions than under the greenhouse conditions. Under slow, cool germination practically every seed will gradually come up. Under quick, hot conditions, only a few will germinate, the rest remaining dormant in the soil. Dampening off will occur only if flats are kept too wet in the greenhouse, without proper ventilation.

THE CULTURE OF DELPHINIUM HYBRIDS—Continued

TRANSPLANTING...

When the second leaves are developed and before the plants are too crowded, prick in flats 3 inches apart in a mixture of two-thirds sandy loam and one-third leaf mold. Keep shaded for two or three weeks; then gradually give more light and, when larger, harden off in full sunlight before planting out in permanent position about two or three feet apart. Open, sunny location is necessary for best development. In shade they will grow too spindly, with only small flower spikes. If too close to walls, they will mildew more than in the open. The ground should be well prepared for planting. A liberal application of well-rotted cow or sheep manure, with a sprinkling of bone meal mixed with the soil, which should be dug a foot deep, will produce fine growth. Heavy, wet soils will require a slight addition of lime. Good drainage and uniform supply of moisture during the growth is essential.

FEEDING...

When the first crop of blooms has faded, cut the flower spikes off just above the foliage and keep slightly dry for two or three weeks, to give the plants time to rest before the new shoots appear above the ground. When this takes place, cut the rest of the old stock off, sprinkle a spoonful of ammonium phosphate around each plant, rake it into the soil slightly and water thoroughly. From the new shoots appearing from the ground select two or three of the strongest and break the rest

out. The remaining ones will develop into fine spikes again.

DISEASES...

MILDEW will attack plants grown close to a wall, or planted thickly together, especially later in the fall. Sulfur, dusted on the foliage, will act as a preventative before the disease is established. GREEN FLOWER—So far this virus disease has been reported only west of the Rocky Mountains and is most prevalent close to ocean areas. It is transmitted by a species of leaf hopper from infected weeds to the Delphinium plants. All plants showing signs of the disease should be immediately discarded. CROWN ROT may be caused by several fungi prevalent in the eastern and southern sections of the United States where high temperatures and humidity prevail during the growing season. For best information send parts of infected plants to your state university for identification. Further information on this subject can be found in the Yearbooks of The American Delphinium Society.

LENGTH OF LIFE...

Length of life of Delphinium plants is governed by several factors. In climates with a long resting period in winter, the plants will usually live much longer than in districts such as central and southern California where this period is confined to but one month of the year. Some may die after the first flowering, while others live for years.

THE CULTURE OF PACIFIC STRAIN POLYANTHUS PRIMROSES

SOWING SEED...

Seed of Pacific Strain Polyanthus primroses can be sown at any time of the year. In the East March or April sowings in frames will provide strong seedlings for September bedding. California and mild sections can sow in June, bedding seedlings in October. Sow seed in flats, or open beds which can be shaded and protected from wind. The best soil is one rich in organic material and light in texture. One-half leaf mold and one-half sandy garden soil is satisfactory. Cover seed lightly with leaf mold or other light material. Vermiculite is a good, light cover. Moisten flats or beds thoroughly, and cover with burlap to prevent drying out. Do not allow flats or beds to become dry at any time during germination, or the percentage of seedlings will be disappointing. Seed

will germinate within two to three weeks. Maintain moisture, and shade from the sun's rays.

TRANSPLANTING...

Transplant in six to eight weeks in a soil previously enriched with old cow or steer manure, continuing to shade. In the East a light mulch will prevent frost heaving. Additional feeding of complete fertilizers before flowering is required for vigorous plants. When two years old, divide and replant in fresh soil. Pacific Strain Polyanthus primroses are hardy in every state in the United States.

INSECT CONTROL...

Control insects with Isotox, disease with Destruxol Koppersol, and soil insects with Dieldrin.





SIZE
OF
SILVER
DOLLAR

EXAMPLE OF OUR PRIMROSES, 9 MONTHS OLD, FROM SEED

PACIFIC STRAIN OF

As the Polyanthus group is the most hardy and easiest to grow of all the Primrose family, succeeding in practically every climate, we have concentrated our work on improving this particular type. Twenty years of intensive breeding have brought a wider and clearer color range, taller stems, and larger size of individual flowers and flower heads than we dreamed was possible. Over 100,000 seedlings are grown annually for selection, one per cent of which is retained for seed production. In this manner, interbreeding only the very finest of the new seedlings and growing a new generation each year, we have been able to develop a strain that is above any competition today.

PLANTS Available in the following colors:

White, Yellow and Gold, Bronze Blends, Flame-Scarlet, Dark Red, Carmine-Rose, Pink and Pastel Blends, Light Blues, Dark Blues, Violet Blends.

Delivery . . .

February-March with flowers on, September-October without flowers.

Price . . .

\$5.00 per dozen; \$40.00 per 100, F.O.B. CAPITOLA.
(No order less than one dozen accepted)



CROSS-POLLINATING NEW SEEDLINGS UNDER GLASS

POLYANTHUS PRIMROSES

The most outstanding new seedlings each year are lifted from field outdoors, potted up and transferred into greenhouses, where they are carefully cross pollinated. While this method is very costly it is the only one that insures the highest quality possible. NATURALLY the quantity is very limited and we recommend it only to those who wish to grow the finest.

SEED AVAILABLE COLORS

WHITE	} \$4.00 packet	PINK BLENDS	} \$5.00 packet
ROSE—CRIMSON ROSE		PASTEL BLENDS	
SCARLET—DARK RED			
YELLOW—BRONZE		BLUE SHADES	
	\$2.00 per		\$2.50 per
	½ packet		½ packet

Complete Mixture

\$4.00 per packet; \$2.00 per half packet.

Full packet contains over 350 seeds.



PACIFIC DELPHINIUM

Contrary to the popular practice of naming individual plants, our aim is to produce a group of individual plants resembling each other as closely as possible, keep inter-breeding them until the progeny brings a high percentage of specimens true to description, and then introduce it as a named series. In this manner we can offer new progressions of each series each year as the progeny always supersedes the parents.

ASTOLAT SERIES

Color variations extend from pale blush through all shades of lilac pink to deep raspberry rose with large fawn and black bees for contrast. The entire range is pictured on these pages.

SUMMER SKIES SERIES . . .

Light, heavenly blue of a summer sky with white bees representing the fleecy clouds; a color long sought in the large hybrid Delphinium. They come almost 100% true to color from seed, with such a uniform growth that many experts who saw the planting last spring at our nursery, thought they were propagated from cuttings and could scarcely believe that they were seedlings. As a class this is the finest blue Delphinium today in existence.

BLUE BIRD SERIES . . .

A true blue Delphinium has been the hardest thing to produce and we have been reserving the name Blue Bird to signify our best achievement in this color. We can safely recommend this series as being the clearest medium blues, with white bees. They not only come true to color but carry well-formed, round flowers $2\frac{1}{2}$ inches in diameter, on very long, graceful spikes. The habit is all one could desire in modern Delphinium and this series sets a new standard in blues of today.

BLUE JAY SERIES . . .

Every Delphinium lover seeks the true blue color which is so rare in nature and so difficult to obtain. These series are our bid toward attaining it. The color is striking, clear medium to dark blue; very intense and alive, with dark, contrasting bee.

BLUE MIXTURE . . .

Besides the named blue series we can supply a complete mixture of blues ranging from lightest to darkest blue with white, fawn and black bees. Each shade when stabilized will eventually be named, but at present all new crosses for that purpose are blocked into one mixture containing all the above series and a great many unusual new shades of blue.

ROUND TABLE SERIES . . .

As the name implies, this represents all of the color combinations of the Knights and their Ladies which will eventually be introduced. This year some three hundred different crosses were used to make up this group, combining all the newest color developments and possessing size that will make them invaluable for show purposes.

STRAIN OF HYBRIDS

The names of our Delphinium series, with the exception of the blues, which have descriptive names, have been chosen from Tennyson's "Idylls of the King."

The Pacific Strain of delphinium has been in commerce for 20 years now and has become a standard for the highest quality in delphinium all over the world. Instead of making extravagant claims, we would like to let our flowers speak for themselves when you grow them.

LANCELOT SERIES . . .

A clear lilac self with white bee. A rare color in Delphinium and one of the most beautiful. It has well-balanced spikes and carries large flowers of fine round form.

GUINEVERE SERIES . . .

A clear, pink-lavender self, with white bee; with very large individual flowers averaging up to 3 inches in diameter. This is a true exhibition type and a beautiful garden plant.

CAMELIARD SERIES . . .

A clear lavender self with white bee, possessing classical perfection of form of the individual flowers, which are very round and attain very large size, averaging 3 inches in diameter. Beautifully balanced spikes, combined with excellent growing habits.

KING ARTHUR SERIES . . .

This is still one of the most brilliant Delphiniums we have so far developed. The color is a rich, royal purple, with a velvety texture and large white bee, and the beautifully formed, long spikes are carried on thin, woody stems.

BLACK KNIGHT SERIES . . .

The darkest violet. Individual flowers $2\frac{1}{2}$ to 3 inches in diameter; of beautiful round form, with heavy velvety texture, which gives the color luminosity and vividness not seen before in Delphinium. Very long, well-formed spikes; a true show flower with black bee.

GALAHAD SERIES . . .

Our greatest achievement in giant whites, fully worthy of its name, which possesses all the qualities one expects to find in a fine Delphinium. The standard attained in this series is perhaps responsible for the wide popularity it met, ranking in demand next to the blues. The clear white flowers, with white bees, are of large size, reaching often 3 inches in diameter, combined with glistening, heavy texture.

PERCIVAL SERIES . . .

A companion to the Galahad Series, of equally good quality. The large, glistening white flowers with strongly contrasting black bees are beautifully spaced on long, tapering spikes. Very vigorous and free growing habit.

Prices of Cross-Pollinated Seed

\$2.50 per packet (over 400 seeds)
\$1.25 per half packet (over 200 seeds)

Collection of any series on pages 16 and 17:
5 packets or 10 half packets \$10.00



DELPHINIUM HYBRIDS

Self Pollinated Seed . . .

Besides the cross-pollinated seed, which is produced only in small quantities, we also supply self-pollinated seed to cover the commercial trade. Of the one hundred thousand seedlings which we grow annually, 40 to 60 per cent are rogued out, leaving only the best for the production of self-pollinated seed which we list below.

NAMED SERIES

For full descriptions see pages 16-17

- | | |
|-----------------|----------------------|
| 1. ASTOLAT | 8. LANCELOT |
| 2. GALAHAD | 9. GUINEVERE |
| 3. PERCIVAL | 10. CAMELIARD |
| 4. SUMMER SKIES | 11. KING ARTHUR |
| 5. BLUE BIRD | 12. BLACK KNIGHT |
| 6. BLUE JAY | 13. ROUND TABLE |
| 7. BLUE MIXTURE | 14. COMPLETE MIXTURE |

Price of Self-Pollinated Seed

\$1.00 per packet (over 400 seeds)

.50 per half packet (over 200 seeds)

DELPHINIUM PLANTS

During March and April and September and October we are offering *strong, young plants*, in twelve assorted shades, as marked from cross-pollinated seed. Transplanted, they will grow rapidly on and bring far better results in a shorter time than the old clumps. We prefer distribution of young seedlings rather than the one- or two-year-old clumps, which very seldom bring good results, as they are quite exhausted, and it takes a year at best to get them re-established, during which time the flowers are not at their best. Young seedlings will produce show specimens within four or five months after planting and continue blooming for several years. In California interior valleys where the climate is too warm, autumn planting, September and October, is preferable. Plants having time to establish good root systems during winter will bring beautiful spikes in early spring. Cooler regions will give good results from both autumn and spring plantings, except in heavy, cold soils, where spring planting is preferable.

SEEDLING PLANTS, F.O.B. Capitola

\$3.50 per dozen, \$26.00 per 100

Orders for less than One Dozen not accepted







HANGING BASKET
TUBEROUS BEGONIAS



VETTERLE & REINELT

Hybridizing Gardens

CAPITOLA • CALIFORNIA